

Shaker Church Family Cow Barn
East side of State Route 4A, 3 miles
south of U.S. Route 4, on Mascoma Lake
Enfield Vicinity
Grafton County
New Hampshire

HABS No. NH-192

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PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

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Historic American Buildings Survey
Heritage Conservation and Recreation Service
Department of the Interior
Washington, D.C. 20243

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HISTORIC AMERICAN BUILDINGS SURVEY

HABS No. NH-192

SHAKER CHURCH FAMILY COW BARN

Location: East side of State Route 4A, 3 miles south of U.S. Route 4, on Mascoma Lake, Enfield Vicinity, Grafton County, New Hampshire.

USGS Mascoma Quadrangle, Universal Transverse Mercator Coordinates: 18.730210.4833375.

Present Owner: The Brewfield Trust, Malden Trust Company, Malden, Massachusetts.

Present Occupant: The Missionaries of Our Lady of La Salette, Immaculate Heart of Mary Province.

Present Use: Light agricultural use, such as storing small amounts of grain and hay and agricultural machinery; also used for other storage.

Significance: The Shaker Church Family Cow Barn, built in 1854, as noted in polychrome slate on the roof, is one of the largest remaining Shaker barns. It was designed and constructed in the simple, functional manner characteristic of Shaker structures. Traditional in its construction methods, the barn had an innovative plan designed for maximum convenience and efficiency. New machinery and dairy practices were introduced here to improve the products and increase productivity. Although altered, the barn retains many original features.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: Preparations began in 1853; the barn was constructed in 1854, as noted in polychrome slate on the roof.
2. Architect: Brother Elkins was named as the designer. This probably refers to James Elkins, not Harvey Elkins, a writer.
3. Original and subsequent owners: The Shaker community at Enfield owned the barn from its construction until 1928. On January 3, 1928 Arthur Bruce and Irving Greenwood, Trustees for the United Society of Shakers of Enfield sold the property to the Missionaries of Our Lady of La Salette. Although La Salette still occupies the property, it is now

owned by the Brewfield Trust, Malden Trust Company, Malden, Massachusetts. The complete legal description can be found in the Grafton County Registry of Deeds, Grafton County Courthouse, Woodsville, New Hampshire.

4. Builders, contractors, suppliers: The Shakers supplied the materials and the labor for building the barn. In a letter dated September 15, 1853 from the Ministry at Enfield to the Ministry at Mount Lebanon, New York it stated: "... the brethren of the Churches of Canterbury and Enfield are hauling stone and making preparations for erecting a cow barn at each place the coming year."
5. Original plan and construction: Brother Elkins, the designer, gave the following description of the barn: "The location and arrangement of this barn edifice are in many respects admirable. It is located across a gentle ravine opening from bank to bank and is so arranged that teams laden with hay or straw may enter at either gable, precipitate the load to the bay below, pass on and make their egress at the other end. Such a situation has enabled them to extend a cellar its whole length for the reception of the manures, both solid and liquid, which are kept from filtration or otherwise escaping downwards by a plank floor laid upon a stratum of clay, wrought as a bed of mortar. The cows will be tethered all upon the south side of the barn, and in one continuous longitudinal stable sixteen feet in width, with walls plastered inwardly with lime mortar, and leaving a wall behind the gutters, of four feet in width, and a corridor or passage between the cribs and mows upon the north side... sufficiently wide for a horse and cart to pass, which is often convenient when feeding with green food.

The scaffolds above the cows are the best depository for litter, which is let down through a trap door in the rear of the cows; and when partitioned into rooms, serve as a place for a herdsman's office. All of these arrangements render it perhaps the most convenient ... barn in America."

Charles Edson Robinson wrote about the barn in 1893, "...one of the finest for stock to be found in that section...In cold weather the cow stalls were warmed by steam to a temperature of sixty degrees, through a line of pipes running the entire length of their apartments. The warm room for the cows, the warm food they are fed and the warm water given them to drink

in cold weather, amply pays for its outlay in an increased supply of milk."

6. Alterations and additions: The vertical wooden siding was covered with asphalt siding during the La Salette ownership. The windows in the loft wall were covered when the asphalt siding was added. Most of the fenestration has been altered, especially in the lower level. Horizontal bands of windows have replaced rows of double-hung sash. The ramp and bridge at the east entrance have been removed by the La Salette Fathers, only the granite entrance remains on the east.

The interior was remodeled in the 1930s. The original cow pens and stalls were removed, and the manure pit was covered. Concrete flooring, cleaning mechanisms, electric lighting, and metal stalls were installed. A large grain storage bin was constructed in the northwest corner of the barn. To allow for this, a hole was cut through to the ground floor.

An 1855 calve shed was originally attached to the southwest corner of the barn. The 1855 structure collapsed in the 1920s and was rebuilt in the 1930s.

Silos were added to each corner of the barn in the 1930s. Only two remain.

B. Historical Events and Persons Connected with the Structure:

The Enfield Shaker community, organized in 1792, was the largest in New England. The society was self-sufficient, even prosperous, with over 300 members and 3,000 acres of land. Farming was their principal industry and they maintained excellent herds of cattle. The Enfield Church Family Cow Barn, designed and built by the Shakers, was one of the largest barns built by the sect. Rivaling it in size were the round barn at Hancock, Massachusetts and the North Family stone barn at Mount Lebanon, New York. New machinery and dairy practices were introduced here to improve the products and increase productivity.

For more information on the Enfield Shaker community see the data pages for the Shaker Church Family Dwelling House, HABS #NH-75.

C. Sources of Information:

1. Old views: Information found in the La Salette Shaker Library, Enfield, New Hampshire includes three photographs (#10, 32, 82) in the photograph file, a photograph album

compiled by Father Daniel Charette, and a 1917 site plan and survey compiled by Lloyd Mann, Civil Engineer, Concord, New Hampshire.

2. Bibliography:

a. Primary and unpublished sources:

Blinn, Henry, Historical Notes. Unpublished manuscript on the history of the Enfield Shakers written by one of the Elders in 1897. Original is at Case Western Reserve, Cleveland, Ohio. A copy can be found in the Shaker Library, Enfield, New Hampshire.

A Historical Narrative of the Rise and Progress of the United Society of Shakers, Enfield, N.H., 1858. An unpublished and unsigned manuscript written at Enfield by an Enfield Shaker.

A letter from the Ministry at Enfield to the Ministry at Mount Lebanon, New York, dated September 15, 1853. Original in the Shaker Manuscript Collection, Western Reserve Historical Society, Cleveland, Ohio.

B. Secondary and published sources:

Elkins, Harvey. Fifteen Years in the Senior Order of Shakers. Hanover, New Hampshire: Dartmouth Press, 1853.

The Ohio Farmer and Mechanics Assistant, Volume 3, #28, July 15, 1854, Cleveland, Ohio.

Robinson, Charles Edson. The Shakers and Their Homes. First published 1893 at the Canterbury Shaker Village, Canterbury, New Hampshire.

Prepared by William Hosley
University of Delaware,
Winterthur Program
and
Preston Maynard
University of Vermont
Summer 1978

Deborah S. Burns
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Historic American Buildings
Survey
September 1979

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The Church Family Cow Barn was planned for maximum convenience and efficiency employing traditional construction methods. The barn was situated on a sloping site to take advantage of the topography. The building expresses its functions of unloading and storing hay and feeding animals, in the simple, functional manner characteristic of Shaker structures.
2. Condition of fabric: Good.

B. Description of Exterior:

1. Over-all dimensions: The barn is 52'-9" (three structural bays) by 140'-9" (eight structural bays) and has three levels situated on a sloping site.
2. Foundations: Randomly laid granite.
3. Wall construction, finish and color: Frame with vertical wooding siding. There are two layers of sheathing, each about one inch thick. Asphalt siding was applied later to cover the sheathing.
4. Structural system, framing: The barn has eight by three structural bays of typical heavy frame construction consisting of wooden posts carrying girts which support the floor joists.
5. Porches: None.
6. Chimneys: None.
7. Openings:
 - a. Doorways and doors: An earthen ramp supported by two curved granite walls leads to large sliding doors on the west elevation. These doors provide access to the central interior driveway. At the other end of the barn on the east elevation are three sets of doors, one on top of the other. The upper most door was originally large sliding doors which also lead to the central driveway.

A ramp and bridge provided access to this entrance; both the ramp and bridge have been removed. Only the battered granite piers which supported the bridge remain. The lower two doors, each double doors, on the east elevation are set between the granite piers.

Secondary entrances of irregular design are located on three elevations. There are three other entrances on the east elevation, one on the west, and three on the south elevation.

- b. Windows: The original double-hung sash have mostly been replaced. The lower level has irregular horizontal bands of small windows. Two double-hung sash remain on the north elevation and two paired on the west elevation. Also there is one double-hung sash in each gable end with small-paned horizontal windows below.

8. Roof:

- a. Shape, covering: Gable roof covered with red, brown, and green slate. The date of the building, 1854, and an outline of the barn are displayed in blue slate on the south slope of the roof. There are five hatches in the roof and a central ventilator cupola.
- b. Cornice, eaves: Overhanging eaves with rake board at the juncture of the roof and wall.

C. Description of Interior:

- 1. Floor plans: There are three levels in the barn. A raised central driveway connects the west and east entrances. Lower hay storage bins flank the driveway. The lower level contains the cow stalls and pens, also the feeding and cleaning aisles. The plan of the barn allows for a wagon to enter through either the east or west entrance, unload hay into the lower storage bins, and then exit at the other end. The hay could then be passed through openings to the lower stall level.

2. Stairways: None.
3. Flooring: The ground floor is poured concrete. The upper levels have 2 1/2" thick rough-cut boards.
4. Wall and ceiling finish: Walls are of rough-cut boards, white-washed on the lower level.
5. Doorways and doors: There are sliding doors, which slide under the floor, in the hay storage bins to allow the hay to be passed through to the lower stall level.
6. Trim: None.
7. Hardware: Replacement stalls and pens are of metal tubular steel construction.
8. Mechanical equipment:
 - a. Heating: The cow stalls were heated by steam to 60o F during the winter. Presently there is a boiler room on the lower level containing parts of a heating system.
 - b. Lighting: Incandescent bulbs in simple fixtures in stall area only.
 - c. Plumbing: Water piped to stall area only.
 - d. Other: There is a circulation fan in the east wall of the upper level. A mechanical floor cleaner was added to the stalls in the twentieth century.

D. Site:

1. General setting and orientation: The barn is located on the east side of State Route 4A in the northeast corner of the Enfield Shaker Church Family complex on the west shore of Mascoma Lake.

2. Outbuildings: The barn is the major structure in the barn yard. An open storage shed is near the southwest corner of the barn. Attached to the south side of the barn is a small milk processing house, a maple sugaring house is attached to this. Silos are attached to the southeast and northwest corners of the barn.

Prepared by William Hosley
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PART III. PROJECT INFORMATION

This project was undertaken by the Historic American Buildings Survey (HABS) in cooperation with the Missionaries of Our Lady of La Salette, Enfield Community, and the New Hampshire State Historic Preservation Office. The recording project was completed under the direction of John Poppeliers, Chief of HABS, and Kenneth L. Anderson, Principal Architect. The Church Family Dwelling House and Cow Barn were measured during the summer of 1978 by project supervisor Patrick M. Burkhart (HABS Washington office); project foreman Lisa L. Becker (University of Notre Dame); and student assistant architects Janet L. Hochuli (The Cooper Union) and Robert G. Krebs (Harvard University). Employed by the Missionaries of Our Lady of La Salette, Preston Maynard (University of Vermont) and William Hosley (University of Delaware, Winterthur Program) prepared the historical data for both the dwelling house and barn and the architectural data for the barn during the summer of 1978. The architectural data for the dwelling house was prepared by Mr. Burkhart and Deborah S Burns, an architectural historian from the HABS Washington office. The historical and architectural data was edited and expanded in September 1979 by Mrs. Burns. Photographs were taken in June 1978 by Jack E. Boucher for HABS.

ADDENDUM TO
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